REMARKS

Claims 1, 4, 5, 11, 12 and 18-20 are pending in the application. Claims 1 and 18 are amended; claims 6, 7, and 13 are cancelled; and new claim 20 is added as set forth above. Reconsideration of the pending claims is respectfully requested in view of the remarks below.

I. REJECTION OF CLAIMS 1, 4-7, 11-13 AND 18-19 UNDER 35 U.S.C. § 112

Claims 1, 4-7, 11-13 and 18-19 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 was rejected because it lacked antecedent basis for "the count" in lines 11 and 12, and "the channel" in line 12. Claim 1 has been amended to remedy these defects. Although claim 13 was rejected because it lacked antecedent basis for some terms, it has been cancelled in this response, rendering the issue moot. Therefore, the applicants respectfully request withdrawal of the § 112 rejection for all pending claims.

II. REJECTION OF CLAIMS 1, 4-7, 11-13 AND 18-19 UNDER 35 U.S.C. § 103(a)

Claims 1, 4-7, 11-13 and 18-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,027,418 (Gan) in view of U.S. Pat. No. 5,418,839 (Knuth). Claim 1 has been amended, and is believed to be patentably distinguishable from the prior art for at least the following reasons.

i. None of the prior art of record teaches "setting the counter to the maximum count each time an erroneous transmission on the frequency channel is identified", as recited in claim 1.

Fig. 4 of Knuth includes a methodology for evaluating frequency channels used between a base and handset of a cordless phone. From time to time, the method "scans" through the available frequency channels and accumulates interference data for each channel (this scanning, which is discussed more below, is carried out roughly

in blocks 106, 108, 110, 112, 114). After completing a scan for the available frequency channels ("NO" at 104), Fig. 4's method resets the scan pointer at block 116 and sorts the frequency channels according to their interference-level at block 118. The sorted channels are then stored at block 120 so channels with lower interference levels (clearer channels) can be preferentially accessed for communication between the handset and base. From block 120, the method returns to 100 and performs another scan (blocks 106, 108, 110, 112, 114) until all available channels have been scanned a second time, and so on. In this manner, Knuth in Fig. 4 shows an on-going method that continuously characterizes and updates interference levels for respective frequency channels. *See generally*, col. 6 line 23 through col. 8 line 34. ***As set forth below, although Knuth's method uses a counter to categorize the interference or so-called Channel Quality (CQ), the particular manner in which the counter is updated is materially different from that of claim 1.***

As shown in Fig. 4 of Knuth, if a carrier (e.g., interference from another cordless phone) is detected during a scan at block 106 for a first carrier, then the method proceeds to block 112 and determines whether the counter M is greater than a maximum value FF. If the counter value M is less then FF, the counter is incremented at 114 for the first carrier. The method then scans through the other available frequency channels. Upon completing the scan, the method sorts and stores the CQ factors. If interference is present on the first carrier in a second scan, the counter M for the first carrier *can again be incremented at 114*. Thus, due to the iterative nature of Knuth's method, ***the incrementing in block 112 of Knuth only increases the counter M incrementally and does not set the counter to a maximum count each time an erroneous transmission is identified, as required in claim 1.*** This functionality is further appreciated by noting that if no carrier or interference is detected, the method decrements the counter M at block 108. Therefore, upon reading Knuth, one of ordinary skill in the art appreciates that Knuth proposes ***a type of balancing where the counter M is iteratively incremented/decremented to give some relative weighting between different frequency channels.*** Because this balancing occurs

over several different iterative rounds it is appreciated that ***Knuth fails to "set the counter to the maximum count each time an erroneous transmission on the frequency channel is identified,"*** as recited in claim 1.

In addition, the claimed manner of setting the counter to the maximum count each time is not insignificant. For example, by setting the counter to the maximum count each time an erroneous transmission is identified, the method in claim 1 ensures that at least a fixed number of measurements (e.g., the difference between the maximum count and minimum count) are taken before the channel is assumed to be available. Thus, in some embodiments, the approach can ensure that at least some minimal time is present after an erroneous transmission. This ensures the method of claim 1 does not inadvertently identify an unduly short break in a source of interference to be a clear channel.

Not only does Knuth fail to provide any suggestion or motivation to set the counter to a *maximum count each time* an erroneous transmission on the frequency channel is identified as set forth in claim 1, but Knuth actually ***teaches away*** from this solution. For example, Knuth explicitly refers to an embodiment which "has the tendency to ***avoid the counter from reaching maximums.***" (col. 7, lines 7-9) Knuth goes on to state that its system "tends to drive the count towards the middle values of the Channel Quality count" (col. 7, lines 13-15). Therefore, a person skilled in the art would not alter Knuth to arrive at the invention of claim 1, and the Applicants believe these claims are patentably distinguishable from the prior art.

Gan does not analyze frequency channels in a data transmission system by incrementing or decrementing a counter. Therefore, Gan fails to ***set a counter to the maximum count each time an erroneous transmission on the frequency channel is identified***, as recited in claim 1. In contrast, Gan discloses a method for channel classification, wherein channels are classified via absolute values of the Radio Signal Strength Indication (RSSI), for example. Therefore, the subject matter of claim 1 is believed to be patentably distinguishable from the prior art.

III. CONCLUSION

As the remaining claims depend either directly or indirectly from claims 1 and 13, which are now believed to be allowable, all claims are believed to be in condition for allowance. Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, LLP113US.

Respectfully submitted,
ESCHWEILER & ASSOCIATES, LLC

By /Thomas G. Eschweiler/
Thomas G. Eschweiler
Reg. No. 36,981

National City Bank Building
629 Euclid Avenue, Suite 1000
Cleveland, Ohio 44114
(216) 502-0600